

**Abstract****ANTENNA DIVERSITY IN A WIRELESS LOCAL AREA NETWORK**

5       A method whereby a mobile terminal (MT) operating in a wireless local area network (WLAN), for example HiperLAN2, can effect antenna diversity. The mobile terminal which has at least two antennas (24,26) monitors downlink fields in successive time frames in a time division radio transmission for indications of when downlink message signals are to be sent to mobile  
10 terminals other than the one effecting the monitoring and determines from the indications when there will be in the time frame a time period of sufficient duration for the mobile terminal to effect antenna diversity measurements. The mobile terminal measures in the selected time period the quality of signal reception by each of the at least two antennas and selects the one of the said  
15 at least two antennas providing the better (or best) quality of signal reception.

(Figure 1)